

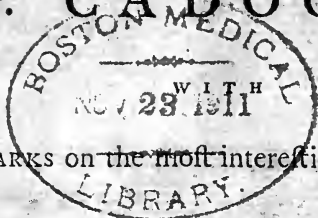
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A
L E T T E R
T O

Dr. CADOGAN,

REMARKS on the most interesting Paragraphs



IN HIS

TREATISE on the GOUT;

In which the immediate Cause of a Fit of the Gout
is proved, both from

OBSERVATION and EXPERIMENTS:

With the Reasons assigned, why the Gout prevails
now, more than it did some Ages ago.

By Mr. DANIEL SMITH.

Printed for CARNAN and NEWBERRY, Booksellers,
in St. Paul's Church-yard, London.

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T O

Dr. C A D O G A N.

S I R,

THE elegant and ingenious St.
T *Evremond* wisely considered
health as more desirable than
the command of the world.

For as certain as the one fills the mind
with perpetual anxiety, the other is the
sweetest source and fountain of terrestrial
happiness; nor have I the least doubt
but every one, who has experienced the
displeasing sensations of debilitating ill-
ness, will freely and sincerely subscribe
to his opinion.

As good health is then so invaluable,
and of such infinite consequence to the
happiness of every individual, all at-
tempts to cultivate and establish it de-

A 2

serve,

serve, at least, the kind wishes of the public; and if any one is so happy, as to investigate that mode of practice, which will recover declining health, he will justly receive the applause of mankind, beside that pleasing and inexpressible satisfaction, which invariably accompanies the acts of a benevolent and good mind. Such illustrious characters were *Hippocrates*, *Sydenham*, *Boerhaave*, *Mead*, and *Huxam*, with many more of our own country, whose names, I doubt not, will continue, with increasing fame, to the latest posterity.

To these ornaments of medical science, I could add the names of some physicians now living; but I shall purposely omit them, that I may not offend the modesty of these deserving men, nor give the world room to accuse me of intentionally paying court to any one. I highly honour the profession of physick, and sincerely think a good physician one of the most valuable members of society. As I am no ways interested in the lucrative part of that science, nor in any shape a practitioner

practitioner (if I except dispensing a few medicines among my poor neighbours without any gratuity) I may say this, without the least imputation of giving consequence to myself in any respect whatever. When I say a good physician, allow me, Sir, to explain, in the best manner I am able, whom I mean as such: It is the man then of universal knowledge, a lively and penetrating genius, great integrity of mind, and a benevolent disposition; not only a man of classical learning, but a skilful anatomist, a good botanist, and an experienced chymist. The importance of a competent skill in chymistry does not depend so much on the value of the medicines that curious art produces, as on its being a key to a comprehensive view of natural knowledge, which helps to explain, not only the cause of many diseases, but the certain method of curing them. If to these qualifications he can join the pleasing art of writing and conversing with ease and elegance, he will be the finished character I mean; and many such there are.

As

As I have just declared, that I am no professor of physick, you will perhaps expect of me an explanation of the motives that induced me to write you a letter, in consequence of the publication of your Treatise on the Gout, which certainly requires some little share at least of medical knowledge. It becomes me, therefore, to satisfy you and every candid enquirer, which I intend to do in the best manner my poor abilities will admit of; and if, in the course of this letter, I dissent from you in any particular, believe me, such difference of opinion does not arise from any interested views, nor have I the least intention to detract from the merit of your well wrote Treatise: I equally condemn the artful flatterer, and the invidious defamer. Believing myself, therefore, free from those vices, you may be assured, in every article, in which I am obliged to differ from you, I will corroborate my observations by the most faithful narrative of circumstances, or by easy and familiar experiments.

ABOUT

ABOUT twenty years ago, I had a regular attack of the Gout, which seized me in the great toe; for the first fit, it was most painfully severe, and lasted upwards of a fortnight. To say that I was much grieved at this unexpected misfortune, is but a faint description of the disquietude of my mind; indeed, I felt every displeasing sensation, that a young man might be supposed to feel, who was not more than twenty-five years of age, and extremely fond of every rational exercise. These painful reflections were much heightened by the consideration of my father's dying in this wretched distemper, and by my strong affection for a fond, amiable, and beloved mother then lingering under the fatal torments of the same disease.

AT the time of being seized with this disorder, I was in appearance healthy, uncommonly temperate, and in constant regular exercise; for, from the nature of the employment that then engaged my attendance, I rode annual journies of near three thousand miles, beside the
pleasurable

pleasurab!e excursions I made in the interval of those of business. For the first three fits I submitted to patience and flannel, which were warmly recommended to me, more particularly as my regularity and temperance were so well known. These three fits were all in the compass of eighteen months; and, as they grew more painful, and their debilitating effects became more alarming, I thought it high time to apply for better assistance, to use such other remedies as were then most in vogue, and which were thought most preventive of the Gout. I tried the Portland powders, Doves's sweating powders, antimony, mercury, and the bark. From neither of these medicines could I receive the least advantage; and the bark was very near putting a period to my life, as it did indeed to a very worthy Clergyman's, who was well known to me. The Gout still gained greatly on my constitution, and became so dreadfully severe, that it dislocated the first joint of my great toe, forced the second joint of my thumb out of its socket, and distorted almost every finger

finger. Under these melancholy circumstances, and not receiving any considerable benefit from the physicians I consulted, I very earnestly, and with much assiduity, entered into the immense wilderness of physick. The principal object I pursued was collecting and selecting every thing that had any relation to my distemper; and, as I have met with the distinguished good fortune to find in these enquiries most invaluable remedies, I should be ungrateful in the highest degree, were I not to acknowledge my obligations to the regular practitioners of physick, from whose labors I received my instructions.

HAVING premised thus much, I will, with all the candor imaginable, enter into a discussion of the most remarkable passages in your Treatise on the Gout.

PAGE 13. " That their opinion of
 " medicine is vain and ridiculous must
 " appear, I think, very evidently to any
 " one who recollects that the art of phy-
 " sick has now been practised more or

“ less regularly, above two thousand
 “ years; and most assuredly there is not
 “ discovered any one certain remedy for
 “ any disease. Ought not this to make us
 “ suspect that there is no such thing?
 “ How can it be, when different degrees
 “ of the very same disease require various
 “ means and methods, and the same
 “ thing, that in one degree would re-
 “ lieve or perhaps cure, in another might
 “ kill?

I wish I could have seen an abler pen
 employed on these interesting observa-
 tions, as in that case I should not have
 troubled the world with mine; and if,
 in the course of them, I often mention
 myself, it is from necessity not choice,
 for certainly, a man's infirmities can be
 no recommendation of him to others;
 nor is the recapitulation of them a very
 pleasing task to himself.

CAN it be supposed, that the benevo-
 lent and supreme Author of Nature, who
 has most undoubtedly supplied the brute
 creation

creation with certain remedies* for most of their natural diseases, wholly neglected man? Does not the inefficacy of medicines applied to human use rather take its rise from the pride, ignorance, obstinacy or avarice of man himself? A dispassionate enquiry into a subject of so much consequence to the health and happiness of human nature may be well worth our pains and attention.

FROM the experience I have had in the application of medicines perfectly genuine, I am induced to believe, there are few diseases, indeed very few, but what are curable by medicine, if patients, in other respects, submit to the injunctions of a good physician. And now give me leave to return to my first question of pride.

“ The bliss of Man, could pride that blessing find,

“ Is not to act or think beyond mankind.”

POPE's *Ethic Epistles*.

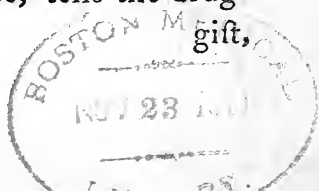
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WOULD

* Allow me to recommend to your serious perusal Derham's *Physico-Theology*, where this subject is treated of in a manner worthy a divine philosopher, and who has very clearly and evidently proved what I have above advanced.

Would physicians in general attend a little more to this rational and elegant thought of *Pope*, and confine their studies more to effects than impenetrable causes, the divine art of healing might be carried to a much greater degree of exactness than it is at present, or is likely to be. The wonderful discoveries that have been made in anatomy, one might have expected would have greatly assisted physicians in investigating the nature and cure of diseases; but is this the case? Are they not as much divided in opinion as ever? Do they not still run into the same idle hypothetic systems? Is not the doctrine of acid and alkaline injuries still unsettled? In fine, what capital point is agreed on, by which we are to judge of the real cause and cure of diseases? Where then is the advantage the medical art has collected from these divine lights? Could medicines (on which I shall soon have occasion to enlarge) be brought to one standard of purity, and the pride of man submit to attend on nature, to report that such and such constitutions, ages and sex, with
 such

such particular symptoms, were relieved by such medicines, then might be expected a regular system of physick, and those unhappy blunders be prevented, which too often happen by men bred to the profession, but not blest with physical penetration. With regard to medicine, is not the multitude of notorious bad ones daily vended a capital cause of the defect in curing diseases? Could *Apollo* himself prescribe, what would it avail, if the drugs were ineffectual? It is much to be lamented, that there does not appear any remedy for this very fatal disease. I have endeavoured, as much as possible, to trace this deadly calamity to its source. Does it not begin with the avarice of the patient, and the consumers of medicines? For my own part, I sincerely believe, neither the druggist or apothecary ultimately to be blamed. The patient too often complains of the apothecary's bill, not considering the smallness of the sum he annually returns, and frequently tells him, he can buy drugs cheaper at other shops. The apothecary, in consequence, tells the drug-



gift, he must be supplied with cheaper medicines, or he shall lose his business. Sophistication, and the introduction of ineffectual drugs, here begin. A very worthy and ingenuous druggist told me, the constant enquiry now, is more after cheap than genuine articles. Indeed, this practice of debasing medicines is become so notorious, that a person of unquestionable veracity assured me, he bought powder of Elecampane for six-pence per pound, which I am informed is barely the value of reducing it to powder, and that half of it must be coarse flour.

IF these common medicines are so shockingly adulterated, what can be expected, but that those of more value will be so likewise?

WHAT a variety of evils spring from this baneful practice! Let us suppose a physician, blest with every natural and acquired accomplishment that can adorn a human Being, sent for to attend on two patients of the same constitution, and in every particular afflicted with the same

same malady; he writes for each to different apothecaries, one of whom keeps the best, the other inferior drugs. The effects of course will be proportionably different. The physician will be fatally deceived, not only in the present instance, but in future, and the patient most probably lose his life. If it should be said, this cannot happen within the bills of mortality, as there are inspectors deputed by authority to examine every apothecary's shop, and see if the drugs are genuine, I answer, this does in some degree check, but not cure the evil. Of the truth of this I was made sensible by an apothecary in London, whom I fell into conversation with on this subject. I asked him how he could avoid being detected by these inspectors: He candidly replied, " I always keep by me a
 " small quantity of those choice drugs,
 " which are most open to inspection, and
 " generally called for by them; such as
 " castor, bark, rhubarb, and a few others:
 " For (continued he) if I were to sell
 " these in the retail way, or dispense
 " them in common, being so inade-
 " quately

“quately paid, I could not maintain my
 “family by my business.” As there does
 not appear any reason to doubt what this
 gentleman told me, let me earnestly re-
 commend a more general liberality to
 the apothecaries, and of course they will
 give the chymist and the druggist a pro-
 per price for genuine medicines, in which
 case it would be highly injurious to doubt,
 but every shop would be supplied with
 as valuable preparations, as Apothecary’s
 hall produces, which are indisputably
 as good as the art and industry of man
 can make or collect.

PAGE 14th. “The skilful in medi-
 “cine, and learned in nature, know
 “well, that health is not to be established
 “by medicine; for its effects are but
 “momentary, and the frequent repetition
 “of it destructive to the strongest frames.”

CERTAINLY, you cannot comprehend
 medicine in general by these observations.
 If you confine it indeed to cordials, opi-
 ates, and draught purgatives, I appre-
 hend the learned, as well as every judi-
 cious

cious practitioner, will concur with you in opinion ; but, if you really allude to every species of medicines, I believe ten thousand instances can be produced to invalidate this remark. I have been daily taking medicines for the Gout, these ten years past, without any intermission, but such as was necessary to make proper observations on the disuse of them ; and I must own I do not discover the ill effects you mention ; nor are medicines less active than they were the first time I took them : Therefore, to do all imaginable justice to the medical art, to enforce the truth of these remarks, and to answer the first part of your paragraph, I will give you a faithful continuation of my own case. If any thing in it may appear improbable, let me intreat you not to draw any unfavourable conclusions from it 'till you have had proper satisfaction in every particular, which I shall always be ready to give, either to you or any other Gentleman, who will honour me with a visit at my house at *Ashton* ; and lest any one may illiberally suppose I have some lucrative

views in this undertaking, I declare I have none; and that, as I do not practise physick, I never will. Having greatly suffered myself from this miserable and painful distemper, I feel much for all those who labor under the same unhappy complaints. From this motive, and purely on their account, I have written these remarks: If I can establish the certain efficacy of this method of relief, which has done me such signal service, I intend to give it to the public for the benefit of my fellow sufferers. Pardon me for this digression.

You will be pleased to recollect, in the account I gave of my first attack of the Gout, that I mentioned my being uncommonly temperate, and that no man used more regular exercise: To this I may add, with much truth, that my mind was at this period as seldom disturbed as that of any one at the age of twenty-five; indeed, that time of life does not often extend a man's connections so wide, or fill his mind with such painful ideas, as are too common at a more advanced

advanced period, when an anxiety for the success of his own family, and a tender feeling for the misfortunes of his friends are very apt to agitate and distract his soul, and to excite those pungent sorrows which do that irreparable injury to the body you have so judiciously and elegantly described under the head of vexation.

AT the time above-mentioned, the constant liquor I drank was water; wine indeed I could not always avoid; but I sincerely declare, taking in the whole circle of the year, I did not drink one bottle a week. My food was plain in general; I eat sparingly of flesh, which I industriously avoided at supper; I kept early hours, and was not remarkably attached to my bed; notwithstanding all which I was afflicted in the severe manner before related. The only alteration I have made in my manner of living is, that instead of water I constantly drink generous cyder, full a year old. I can therefore with propriety say, that I am so much relieved by the sole power of

medicine as will scarcely be believed; for instead, of three or four fits a year, which I constantly had, I have now but one; and from a debilitated and crippled state, my health and limbs are so well recovered and established, that I can walk, with ease and pleasure to myself, for five hours with a fowling piece in my hand, and frequently wade through water up to my knees, without the least danger to my health. In the paroxysm of the Gout, and in the most excruciating torments of a fit, I have procured myself perfect ease in two minutes, and for these seven years past I have not born the pain half an hour in each fit. It is equally surprising, that tho' my knees have, in the course of several fits, been swoln as big as my head, they are free from callosities, and as pliant as they were at the time of my first seizure. To reconcile this phænomenon, I must tell you, that my knees were not attacked with any great violence till within these twelve years, which was about the time I began the use of an external remedy I now constantly apply; and the knees being the

most

most convenient part for that purpose, I use it there with freedom, and in considerable quantities, not that I now fear using it any where; for, in the last fit of the gout I ever had, I was exceedingly alarmed by a dreadful pain in my breast-bone. I was for some time held in suspense, whether I had best apply the remedy there, being so near the regions of the stomach. The pain, however, at last became too excruciating to admit an alternative, and had the event been ever so doubtful, I verily believe I should have applied it: It gave me, as usual, instant ease, and I soon recovered.

THE consequence likewise of the application of this external remedy has been a discharge of at least half a pint of gouty humor, during the paroxysm. My reason for believing it to be a gouty humor arose from the following circumstances: About a month or six weeks preceding two fits of the gout, which happened to me three or four years since, there was collected, on one of my fingers, and on my

my great toe, a white soft swelling, which increased to the bigness of a large cherry stone, and was of that kind of substance not concreted, which readily yields to a soft impresson, such as you must frequently have seen in subjects much afflicted with this distemper. In the fit succeeding this appearance, I had a considerable discharge from my knees and right elbow, when these swellings entirely disappeared. In another fit of the gout, I was severely attacked in my shoulder, which I treated as usual, and the pain quickly left me. The day following, it came into my other shoulder. Being then deprived of the use of both arms, I was incapable of disengaging myself from my waistcoat and jacket; therefore could not apply the remedy: and, as the pain was not very violent, I bore it 'till I recovered the use of the anointed shoulder, from which there was a considerable discharge. The event of this experiment was, that the shoulder, which I was prevented from anointing, did not give me its perfect assistance under three months, which the other did in less than
three

three weeks. Indeed it is scarcely credible, with what strength and expedition I always recover the joints treated in this manner. From these circumstances, and that I have not had one callosity formed since these discharges, I think I may fairly conclude them to be gouty a humor.

PAGE 17. “ The gout is so common
 “ a disease, that there is scarcely a man
 “ in the world, whether he has it or not,
 “ but thinks he knows perfectly what
 “ it is: so does a cook-maid think she
 “ knows what fire is as well as Sir *Isaac*
 “ *Newton*. It may therefore seem need-
 “ less at present to trouble ourselves about
 “ a definition what it is; but I will ven-
 “ ture to say, what I am persuaded it is
 “ not, tho’ contrary to the general opi-
 “ nion: it is not hereditary, it is not
 “ periodical, and it is not incurable.”

As you seem to think few people know more of the gout, than a cook-maid does of fire, and as you have made this disease so much your study, I believe there are many more beside myself, who wish you
 had

had given us some little light at least into the immediate cause of a fit of the gout. You will pardon me, I hope, for endeavouring to supply this defect, which I will try to do by its visible effects; and I hope, in so clear a manner, as will convince every one, who has had the gout, or will go through those plain experiments I shall point out.

THE immediate cause then of a fit of the gout, I apprehend, arises from too great a quantity of acrid alkalious humors introduced into the whole mass of blood, either by the natural formation of the distinct parts of the viscera, which generate these humors in greater abundance than is or can naturally be carried off by exercise, &c. or by intemperance, which has a propensity to generate such humors. A fever, in consequence ensues, by which means nature disengages itself from this load of humors, and propels it either to the extremities or to the urinary passages. In the first instance, it either forms callosities and chalkstones, or is, by the forcible action of an increased circulation,

drove

drove through the cutis and cuticle: there it rests on the surface, and sometimes, when the part has been kept covered during the fit, it has been scraped off a perfect powder of chalk. In the second instance, it forms the stone and gravel: a case equally deplorable.

To prove that the blood is in this state, I will candidly communicate what I have observed in my enquiries into this matter. The illustrious *Boerhaave*, in his *Analysis of the Blood*, says, “ if you
 “ take the serum of the blood of a person
 “ in health, and drop any acid into it,
 “ there does not appear any effervescence:
 “ if you drop any alkaline body into it,
 “ the effect is the same.” From whence he concludes, that it is a perfect, insipid and neutral body. The deference I have always paid to the opinion of this truly great man, and to his experiments, produced an implicit confidence of my being in an error, by entertaining a contrary opinion. However, some time after this, I was trying some experiments on a medicine that was sold for the stone and

D

gravel,

gravel, and which was certainly nothing but a strong lixivium made with lime and a fixed alkaly, that answering the same to every experiment. Into this strong acrid alkaline body I dropt some well rectified spirits of vitriol, and there did not appear a greater ebullition, than is common in mixing of it with pure spring water. On trying it, however, with syrup of violets, it turned as green as grass. It is therefore apparent, that the usual method of trying alkalious bodies with acids, sometimes fails; with syrup of violets never. On this consideration, I tried the serum of blood with syrup of violets, and it turned it likewise green.

It is true, the serum of all blood turns green with syrup of violets: however, I took equal quantities of the serum of blood from a healthy subject, and from one in a violent fit of the gout: The latter was much greener than the former; from whence I conclude, that there is more of an alkaline body in the one than in the other. Not altogether
satisfied

satisfied with this experiment, I took four ounces of blood immediately from the arm of a healthy subject, which I directly distilled in a retort. I then took exactly the same quantity of blood from a man in a violent fit of the gout: This I treated in the same manner, with the same degree of fire, and continued it the same time. The event of this operation was, that the blood of the gouty man produced full one quarter part more of an alkaline spirit, than that of the man in health. I am aware, that fire will generate an alkaline body, where there is none. However, these two experiments being well considered, I apprehend will nearly establish the truth of what has been advanced.

If there are any, who, from these experiments, may injudiciously conclude, that, as the blood of a person in health is alkalescent, an additional quantity cannot be injurious, give me leave to observe to such persons, that a certain degree of heat is necessary to preserve animal life; that if it is below one cer-

tain point, it congeals the blood; if above another, it causes putrefaction and death.

It is also well known to every judicious practitioner in agriculture, that if you lightly sprinkle the fields with good manure, it will remarkably fertilize the ground; but, if you lay it on thick, it will certainly destroy the herbage it ought to nourish. I grant there is a considerable difference between the objects in comparison: However, I believe, the similitude is a just one. A variety of other familiar experiments might be produced, both from art and nature, were it necessary; but these I hope will be sufficient to convince you, and every unprejudiced reader. I have made experiments on the blood of a great variety of animals, and they all appear to possess the same quality, even those that live entirely on acescent food, as horses, oxen, deer, and sheep: It is therefore apparent, that the all-wise Author of nature intended it should be so; and indeed, if you consider, that out of this soft liquid serum

are

are formed the bones, horns, hoofs, and feathers of all animals, which are apparently alkalescent bodies, we must cease to wonder.

As the matter now under consideration, is of great moment, in order to form a clear conception of the immediate cause of a fit of the gout. I shall relate every thing that occurs to me on the subject, which I hope will not be thought tedious. The following pertinent narrative I had from Mr. WELLS, a surgeon in *Bristol*, a man that does honour to that very useful and ingenious profession. A patient of his had for some years been most remarkably troubled with worms: He was likewise a gouty subject, and died of that complaint in his stomach. The friends of the deceased were exceedingly desirous the body should be opened, in order to be satisfied in regard to the first complaint. This Gentleman was sent for to assist in the operation. On the body's being opened, there did not appear any traces of worms; but Mr. WELLS observed, "that the gall bladder was full
 " three

“ three times as big as usual, the bile of
 “ the consistence of very thick batter, and
 “ the whole alimentary tube was be-
 “ smeared with a large quantity of the
 “ bile.” That bile is of an acrid alkaline
 nature, no one I believe will deny, and
 may not this be one natural reason for
 the gout in many people? It is to be
 wished, that dissections of gouty subjects
 were more common, as the strictly ascer-
 taining this particular, might be a means
 of settling this disease on a scientifick
 footing, then indeed all gouty people
 would, with the assistance of a good
 physician, stand a fair chance of receiv-
 ing benefit, and even now, from the
 knowledge I have of this disease, I would
 recommend such a skilful attendant; for,
 certainly, the consideration of saving a
 few guineas is miserable œconomy, where
 life and health are at stake.

To return to the subject, let us now
 take a view of a person much afflicted
 with this deadly distemper, who has
 submitted to patience and flannel, and
 who has not been able, from the nature
 of

his debilitated state, to use much exercise, are not his joints swelled with callosities, or filled with chalkstones? That this is an alkaline body likewise, every one may be satisfied by the following plain experiment. Take some of the white substance from the joints of a gouty man, and put it into a little phial bottle; into another bottle of the same size, put some common chalk, of about the same bigness; into each bottle drop some well-rectified spirit of vitriol, and you will soon see a violent ebullition in each of these two bodies nearly the same; and, if you add enough of this spirit, the alkaline substance will be entirely dissolved. You will perhaps, say, all gouty subjects have not the appearance I allude to. This I will not deny; but they have then what is still worse, the stone and gravel, which are also alkaline bodies.

FROM what has been said, and proved by experiments, is it not clear and apparent, that the blood of gouty people abounds too much with alkalescent humors? I have, indeed, been somewhat
more

more particular in this matter, because it has been asserted by many people, and some too who might have been supposed to be well versed in the laws of nature, that the gout proceeded from an acrescent disposition of the blood. This most certainly is impossible, and if there are any still in this belief, which may have an injurious tendency to persons of a gouty habit, let me satisfy them by the following experiment. Take some of the serum of the blood, both from a healthy man, and from one in a fit of the gout; drop into each some syrup of violets, and mix it well, in which case, if the compound liquor does not incline to a red colour, be assured there is not the least acid in it, which will be evidently confirmed, by dropping some syrup of violets into any acid liquor, as that will in every instance turn of a red colour.

As to the gout not being hereditary, it is a matter not worth contending for. You allow, that we receive from our parents constitutions similar with theirs, and I think I may venture to say, there
are

are thousands beside myself, who cannot account how they came by the gout, unless it was through this channel. I have a sister now living, who has been as much afflicted as myself. She was not more than forty, when she was first attacked with the gout, and now is not old. Few women were ever more temperate either in eating or drinking, and she beside used full as much exercise as most women in common, who are not obliged to earn their bread by the labour of their hands. It is likewise strange, that one of your extensive practice has not seen many women troubled with this disease: it has been my misfortune to have known many in the circle of my connections, which is not very large.

THAT it is radically curable in every subject, I much doubt: there are some, I believe, who have acquired it entirely by indolence and intemperance; these indeed stand the fairest chance of such a cure. I believe your remark, that it is not periodical is very just.

PAGE 26. “ They fancy too, that
 “ there is a great variety of constitutions,
 “ with diseases unavoidably peculiar to
 “ each; that certain times of life must
 “ produce many, and that it is impos-
 “ sible to grow old, without sickness of
 “ some kind or other. There is cer-
 “ tainly no foundation in nature for any
 “ of these opinions; nor is there any
 “ real essential difference of constitutions,
 “ but of strong or weak, and this is
 “ produced more by habit than nature.”

IF there is not a great variety of con-
 stitutions, how can you account for that
 essential difference, which is so visible
 in the colour, disposition, and affection
 of human nature? For instance, one per-
 son's hair is black, another's white, and
 another's red; and from these colours
 it is divided into innumerable shades.
 The skin of one man is as fair as ala-
 baster, that of another's is as brown as
 a Mulatto; one man is as bold as a lion,
 another is as timid as a hare; see one
 man generous and noble, while another
 is penurious and mean; a passionate love
 for

for the amiable fair sex prevails in one man, while another wretch hates them; this you see always chearful, another forever gloomy; and whence can these so apparent differences arise but from different constitutions? Will not a nice examination into the animal machine (without the aid of metaphysical reasoning) give us some light into this visible diversity in mankind?

It has been before observed, that all the solid parts of an animal are produced from the serum of the blood, and that this is a compound body I shall not take any pains to prove, as it so evidently appears to be formed by the united assistance of the liver, the pancrea, the saliva glands, &c. &c. May not then the different proportions of these bodies, in different people, produce the diversity above-mentioned; as you will certainly allow as many different compounds may be made with the liquors from these several parts of the animal œconomy as there are visible differences in mankind; and as each more or less

prevails, so do the colour, disposition, affections, and the disease peculiar to each. That the mental faculties are affected by these parts of the animal machine: and these parts by the mind, the following well-attested relation will prove. I had it from a Lady near *Bristol*, of great candor and distinguished fine sense, who told me, she was nearly connected with a Gentleman, who was accidentally entangled in an unlucky affair, from which he could not disengage his thoughts, with all the assistance of his own reason, and the arguments of his friends: it therefore preyed on his mind, and his health visibly declined. Here all the means, that human skill could exert, were tried in order to preserve a man exceedingly dear to his friends, and valuable to society: the medical art failed, and he died. The friends of the deceased directed the body to be opened, to see if possible what was the cause of his death; when it appeared, that the spleen was entirely wasted away.

To illustrate this farther, be pleased to consider the very extraordinary transformation of an egg into a chicken ; who could have conceived, from the meer force of finite reason, that in appearance a meer simple, insipid, homogeneous body, without any sign of life, by the assistance of either a natural or artificial heat of 96 degrees, by Fahrenheit's Thermometer would, in the space of twenty-one days, be converted into a perfect living animal, formed with every member peculiar to these creatures, with a diversity of coloured feathers, with a beak and claws, as hard as horn, and with all the passions and sense observable in animals? If the white of an egg, therefore, produces this amazing variety observable in a fowl, can it be wondered at, that so visible a compound body, as the serum of the human blood, should give the different constitutions, and of course diseases in man?

Now, to prove evidently the amazing effect of compound bodies, even in their nature similar, allow me to insert the

the following experiment, well known to every adept in chemistry, and every assay artist.

TAKE a thin solid piece of gold, and put it into a cucurbite, to this pour in some strong spirit of nitre, and keep it in a warm place some little time, and you will find the gold just the same as it was at first: repeat the experiment, in the same manner, with strong spirit of salt, and the event will be similar. Now take the two acid spirits above-mentioned, mix them well, and proceed as before: you will then see this very ponderous, solid mettle, entirely dissolved, which was not before the least affected by either of these bodies separate.

LET these evident operations of art and nature teach us not to pronounce hastily of things not ascertained by demonstration and experiment. I am now come to your observations on indolence, which I have considered with infinite pleasure. It will not, by any means, depreciate your performance, by saying,
that

that every considerable author, that has treated of the gout, has inculcated the same doctrine; on the contrary, the concurrent and undivided opinion of so many learned and judicious men puts it most evidently out of doubt. I must beside do you the justice to say, that you have new dressed the subject, and have given, to just and profound reasoning, all the grace and elegance of fine writing. I most sincerely wish it was read and observed both by the healthy, and infirm: the first it would be a means to keep in that most desirable state, and the last would, at least in some good degree be restored.

FROM this, I shall pass on to your consideration of intemperance; and, tho' there are in it some very judicious and useful instructions, there are others also that I cannot help thinking, if attended to, will be not only exceedingly injurious to gouty people, but pernicious to those in health; and as I have positively no views in this publication, but the happiness of society in general, and of the gouty in particular, I shall do the
best

best I can to point this out. I am not, however, so tenacious of my sentiments, but that I wish every one may dispassionately compare what has been said by you, and asserted by me, in either case: if they should from experience prove the truth of this controverted point, it is to be hoped, for the benefit of people in general, that they will publish it with the honourable testimony of their names.

PAGE 59. “ It may here be necessary
 “ to enumerate some of those things
 “ called acescents. These are sweets of
 “ every kind, puddings, cakes, pastry,
 “ creams, confections, &c. and every
 “ thing made of flour, especially fer-
 “ mented; bread, in particular, so far
 “ from being the wholesome thing many
 “ imagine, is not only unwholesome by
 “ its acescency, but by the strong fer-
 “ ment it contains: it forces into fer-
 “ mentation every thing capable of it,
 “ that it meets with in the stomach.”
 To which is subjoined the following
 note: “ Whoever requires proof of this,
 “ may have it by the following experi-
 “ ment:

“ ment : Put a common toast into half
 “ a pint of water, and let it stand six or
 “ eight hours near the fire, so as to be
 “ kept in the heat of the human stomach,
 “ and it will be four as vinegar.”

I will not controvert the truth of your experiment: admitting it, therefore, to be true, pray what is it the poor people of England, Scotland, and Ireland, principally live on, but this very acescent bread? or, what is equally acescent, the flour of beans, peas, wheat, barley, rye, and oats, made into pies, puddings, cakes, &c.? with this they join potatoes and milk in great quantities, both which are acescent, beside the whole tribe of vegetable substances, all of which are likewise acescent, if we except leeks and onions, which make but a very inconsiderable part of their diet. I exclude from this remark the common beggars; for it is a notorious truth, that they live in indolence, and riot in luxury: I mean only the industrious poor, who are certainly the most robust and healthiest inhabitants of these islands, freest from

F

diseases,

diseases, and strangers to the heartburn; for the truth of this, I appeal to every one, who has made any enquiry into this matter. A Gentleman of nice observation, who has visited most parts of Great-Britain, as well as Ireland, assured me, that he had conversed with people, whose families had not eat a pound of cheese in a week, nor tasted either fish or flesh for a month, but that their food was barley bread, milk and potatoes; yet were they remarkably healthy, and had fine florid complexions. This is likewise the case with the European poor, on the continent, as can be well attested, Give me leave now to travel with you among the Asiatics, a people you have properly remarked as free from the gout, and all chronic diseases. Is not their food mostly rice, milk, and roots of various kinds? all which are likewise acescent? With these they join not only occult, but manifest acid fruit, which that country produces spontaneously in great abundance, such as tamarinds, citrons, oranges, lemons, pine-apples, plumbs, cherries, grapes, and a multitude of

of others ; all of which are kindly given by the Divine Author of Nature, evidently to counteract and prevent the putrid and pestilential disorders common in that country. To these remarks, allow me to add, that the whole atmosphere, when in a benign state, is replete with acid particles. As this assertion will perhaps seem strange, if not improbable, to people unacquainted with nature, and its curious and surprising productions, I will take the trouble to transcribe, from Doctor *Cramer's* art of assaying metals, the process of making nitre, which clearly demonstrates the fact, and from whence some very useful inferences may be drawn.

“ CHOOSE a place quite open to the
 “ air; however, a field or a garden will
 “ be best. Upon the area of it, which
 “ must be eight foot long, and as much
 “ broad and deep, build a small hut of
 “ mud, having its top thatched with
 “ straw, and sloping, to shelter it from
 “ the falling rains. Let the height of
 “ it, from the ground, be such that a

“ man, standing upright, may walk un-
 “ der the roof. Let a door be made,
 “ through which the artificer may get
 “ into the said hut, and that may be
 “ opened and shut. Beside, leave here
 “ and there in the walls small windows,
 “ with small shutters to them, that you
 “ may at pleasure admit or keep off the
 “ air from it ; against the right and left,
 “ and hinder walls of this hut within,
 “ contrive square partitions, two feet
 “ long, as much broad, and one foot
 “ deep, divided with wooden boards,
 “ one inch and half thick. Fill them
 “ with a composition made with the
 “ ashes of burnt vegetables, lime, and
 “ horse-dung, mixed up with urine.
 “ This composition being the matrix for
 “ nitre, a pound of it, if the winds are
 “ north-easterly, and not very cold, will
 “ in two months produce two ounces of
 “ nitre.”

LEST any one may suppose, that nitre
 ultimately existed in the above compo-
 sition, before it was exposed to the air,
 it will be necessary to mention a well
 known

known experiment ; that if you expose to the air the very body, from which the acid spirit of nitre has been drawn, it will attract the acid again, ad infinitum. This process clearly proves, that the air is replete with acid particles, and its salubrious quality is proved by the testimony of the best historians, who have observed, without knowing or assigning the cause, that in those countries, where the plague prevails, when the winds have shifted from the south-west (at which time the air is destitute of acids) to the north-east (which brings with it acid particles in great quantities) this disease vanishes immediately.

As the winds in the eastern countries continue in these quarters a long time, and is certainly one cause of pestilential disorders, may not the perpetual shifting of the winds in England be the reason we are so seldom afflicted with this calamity? To return to the observations on acids, give me leave to add what the learned and judicious *Huxham* has said
of

of bread,* and if my testimony will have any weight with my brethren in affliction (the gouty) I now do sincerely declare, that, for seven years past, I have every day, about half an hour before dinner, drank half a pint of warm water, moderately acidulated with spirits of vitriol, and with what advantage, I refer the reader to the before-mentioned particulars of my own case, to which, however, I will add, that this remedy cured me of the heartburn, after having tried the whole tribe of alkalies in vain.

THERE is one circumstance, that I often thought has misled many a gouty person, who has been prevailed on to take any thing acid; for if the blood at that time is replete with gouty humor, the acid immediately agitating the animal juices in the first passages, soon commu-

* “ The animal humors naturally run into dissolution
 “ and putrefaction, unless prevented and corrected by
 “ daily supplies of acescent aliment: a diet merely of
 “ flesh, fish, spices, and water, will very soon bring on a
 “ putrid fever. BREAD is not only the staff of life as
 “ nourishment; but as it also corrects by its acescent qua-
 “ lity the rank juice of animal food.”

communicates it to the whole mass of blood, which precipitates a fit, not much unlike what may be observed, by pouring a little spirit of vitriol into oil of tartar, which it instantly sets in a ferment, and drives the alkaline salts to the bottom.

IF these people would but reflect a moment, I think they would be sensible that a little acid could never do so great an injury; and, from what I have so candidly said of myself, they will be convinced it is impossible: for if acids manifestly did any injury to a gouty habit, in what a wretched condition must I have been, who have taken such prodigious quantities both in medicine and in acescent food? Let us therefore not attend to sounds but things; by the first we may be misled in the course of that specious reasoning, which is in the power of every fine writer; by the latter we can never be deceived.

I am now come to your observation on the bread of *London*, which you say has
a great

a great quantity of four allum in it, for a proof of which you have given us the following experiment.

“ BOIL a pound of common *London*
 “ bread in a sufficient quantity of water
 “ to make it thick as gruel; let it stand
 “ to subside, pour off the clear, and boil
 “ away all the water: the allum will be
 “ found at the bottom.”

I would willingly believe this experiment was never made by yourself; but that the multiplicity of your practice not giving you time, you committed the operation to some injudicious person, who has misled you. I wish every one else to believe the same, as otherwise it may prejudice them against other parts of your Treatise, in which are many very valuable observations.

SINCE I read your pamphlet, I have taken some pains to inform myself of the method of making bread, not only in *London*, but in other places; and I find that, in all bread made for sale, there is
 common

common salt mixed with it. The usual quantity is about two drachms in one pound of bread: to this we will add the vegetable salt, which all grain abound with, and is, we will suppose, about one drachm in a pound of bread. Now, as water is the menstruum of all salts, as well as that of allum, it must consequently in boiling take up these two salts, which will, from the nature of the operation, be a compound one, and is really a large quantity. Is not this the supposed allum? if not, it must be allowed, that, to distinguish the prevalence of allum in this compound body of salt, it must be, at least, twice as much as the two salts together before-mentioned, and, if that was really the case, the prodigious roughness of allum is so remarkable, that no human creature could eat the bread, in which so great a quantity was; and I verily believe, if half the quantity of allum was put in it, as there is of common salt, it would sensibly affect the palate. But is this the case? For my own part, I eat of the bread of *London* for years, and I own I never discovered any roughness; nor can

I recollect, I ever heard of any one that did.

To enter a little further into this affair, let us attend to the following calculation. If the quantity of allum used in bread is twice as much as that of the common and vegetable salt, it is six drachms in one pound of bread. If the number of people, within the bills of mortality, is eight hundred thousand, and each person eats three quarters of a pound of bread per day, then the quantity consumed will be six hundred thousand pound. If there are six drachms of allum in one pound of bread, there will be consumed fourteen thousand and sixty two pound every day, which, in one year, is five million one hundred thirty-two thousand six hundred and thirty pounds----a most enormous quantity! If we extend the calculation, and take in all the bread made by the bakers in *England*, I suppose all the allum in the world would not equal the sum. As I verily believe bread to be the most wholesome part of our food, I should be very sorry to see any one prejudiced
against

against it from any thing that has yet been said. If there are any such, I advise them, for their own sakes, nicely to consider what has been urged for and against it; and, after that, to try the experiment you have directed, with this additional circumstance, to press out all the water that remains in the pulp, as a proportionate quantity of the salt will be in that water. I would advise this trial to be made with a pound of bread, bought of a baker most suspected to use allum; and then repeat the same trial with a pound of bread made immediately under their own observation: by this means they will be enabled to ascertain the truth of what has been advanced in relation to bread.

It ought, in course, to have been taken notice of, that your remarks on meat over dressed are certainly judicious, and well supported by clear reasoning. The same must be said, with regard to your opinion of wine.

I very sincerely wish with you, that pickles, catchup, and all kinds of pro-

vocatives to eating, were banished from every table; not indeed from the acid they contain, which is absolutely necessary, if people will devour such quantities of fish and flesh: (for that in some degree prevents the injury so much alkalescent food would otherwise do) the prejudice done by them is that of enabling people to eat so much more than is necessary, and consequently overloading the stomach of the animal machine, which in this particular may, with some propriety, be compared to a mechanical one, which, if you load with twice the weight it was intended to carry, will soon be demolished; whereas, if loaded with a weight proportioned to its strength, it would remain for years.

THE remarks I made on your observations upon indolence are with great propriety applicable to those upon vexation.

I will now take notice of a very capital article, which regards both the healthy and the valetudinarian, and which has escaped your observation. I wish it had been better enforced by a stroke of your pen,

pen, and treated in a scientific manner. All I shall aim at will be, to make my observations clear and intelligible. The thing I mean, is the circumstance of non-mastication. Mastication being the first act of digestion, an error here is of greater consequence, than people in general can possibly conceive. To familiarize this, be pleased to consider, if you are to work any mathematical proposition, the error but of one single figure, in the beginning, will introduce confusion through the whole. If you lay a bad foundation, the superstructure must be defective, &c. &c. If this is granted, then of what moment is it to regard the act of masticating food well, before it is swallowed! I will venture to say, a good concoction can never be made, if this act is not well performed. Our fore teeth were given us, no doubt, to divide the food we take into the mouth; the jaw teeth, from their make, evidently point out to us, that they were intended to grind it: with these then we should separate and thoroughly mix the food, assisted by the saliva, which flows into the mouth in considerable

considerable quantities, if invited by this act of mastication. When this is well done, it will become a soft homogeneous mass, which, when carried into the stomach, will, by the other concurring acts of digestion, be easily reduced into good chyle, from which all the liquid and solid parts of an animal are made and supported. Give me leave now to consider, a little further, the ill consequence that must attend the not regarding this very rational act. In the first place, when the food is swallowed almost whole, it will be three times as long in concocting, as is evident; for, if you put into warm water any dissoluble body in a lump, and then divide the same quantity into a hundred parts, how much sooner will the latter be melted than the former. In the next place, the food being of different and opposite qualities, the one will dissolve, while the other remains almost in the state it was in when swallowed. From this circumstance, perhaps, arise those disagreeable eructations, which too plainly tell you, that the food, you unwillingly taste a second time, is not digested.

digested. From this irregular concoction flow many evils and diseases, impossible to be investigated by human knowledge.

FROM this I shall pass on to your treatment of a patient in a fit of the gout.

PAGE 82. “ If the point be to stave
 “ the violent raging of a present parox-
 “ ysm, this may be safely done by giving
 “ some soft and slowly-operating laxative,
 “ neither hot nor cold, but warm, either
 “ in small doses, repeated so as to move
 “ the patient once or twice in twenty-
 “ four hours, or by a larger dose oftner in
 “ less time, according to the strength
 “ and exigency. This may be followed
 “ by a few lenient, absorbent correctors
 “ of acrimony, or even gentle anodynes:
 “ proper cataplasms may also be safely
 “ applied to the raging part, which as-
 “ suage pain surprizingly; with as much
 “ mild and spontaneously-dissolving-nou-
 “ rishment, as may keep the spirits
 “ from sinking too low. I would wish
 “ them to sink a little, and exhort the
 “ patient to bear that lowness with pa-
 “ tience

“ tience and resignation, ’till nature;
 “ assisted by soft and succulent food, can
 “ have time to relieve him. This easy
 “ method of treating a fit of the gout
 “ would answer in any age; and, if the
 “ patient was young and vigorous, and
 “ the pain violent, there could be no
 “ danger in taking away a little blood.
 “ Thus, in two or three days time, I
 “ have often seen a severe fit mitigated,
 “ and made tolerable; and this is a bet-
 “ ter way of treating it, with regard to
 “ future consequences, than bearing it
 “ with patience, and suffering it to take
 “ its course: for the sooner the joints are
 “ relieved from distension and pain, the
 “ less danger there is of obstructions
 “ fixing in them, or their being calcined
 “ and utterly destroyed. But instead of
 “ this, the general practice is quite the
 “ reverse. Oh, keep up your spirits,
 “ they cry; keep it out of your stomach
 “ at all events; where, whenever it rages
 “ in a distant part it is not at all inclined
 “ to come! As you cannot eat, you must
 “ drink the more freely. So they take
 “ cordials, strong wines, and rich spoon-
 “ meat.

“ meat. By urging in this manner,
 “ a great fever is raised, the pain enraged
 “ and prolonged, and a fit, that would
 “ have ended spontaneously in less than
 “ a week, protracted to a month or six
 “ weeks; and, when it goes off, at last
 “ leaves such obstructions and weakness
 “ in the parts, as cripple the man ever
 “ after. All this, I hope, will be fairly
 “ and candidly understood; for there is
 “ doubtless a great variety of gouty cases,
 “ but no case that will not admit of me-
 “ dical assistance judiciously administered.”

In general, this treatment of the gout
 is exceeding proper, and well worth at-
 tending to by every practitioner of phy-
 sick. If the medicines, you direct first
 to be given, gently encouraged every sen-
 sible evacuation, I am convinced, from
 much experience and attentive observa-
 tion, their effects would be more sanative
 than mere purgatives, particularly those
 of the active kind, the bad effects of which
 are only to be allayed by some preparation
 of opium, whose ill consequences are still
 more injurious in gouty habits, as it al-

ways causes a languid circulation of the blood, when its powerful efforts are spent. By a medicine of the kind above-mentioned, I have, I suppose forty times, carried off the symptoms preceding a fit of the gout. I take it early in the morning, and about an hour after drink a pint of green tea, as hot as I can bear, covering up myself very warm. This always encourages a gentle diaphoreses, and at the same time acts as a urinate. The purgative part being slow in operation, never gives any notice of its power, 'till towards the middle of the day, before which time, by putting on fresh linen made very hot, and sitting up in the bed, the sweat kindly goes off without any danger or inconvenience whatever.

THE great advantage of encouraging a gentle sweat by this salutary and easy method is extremely obvious, as it carries off those fluids ready for expulsion, and at the same time clears the capillary vessels, which, by being stuffed with acrid particles, certainly occasion that excessive pain too well known to gouty people.

people. This will still more clearly appear, if we consider, that the first fit of the gout is generally in the great toe. Here the fine capillary tubes, not defended by any fleshy substance, easily yield to the compression of the shoe against the bone; consequently the diameter of the vessels must be lessened, the particles then, which would have circulated through the large vessels, stick here and cause a stagnation, which brings on that visible inflammation in the part affected. It is also probable, that this is the reason, why the gout generally settles first in the joints of the feet and hands: as the capillary tubes are smaller there than in most other parts of the body. The good effects of gentle urinatives are likewise exceedingly manifest, as they carry off those humors propell'd to the urinary passages, which are certainly of the acrid and alkalescent kind, as appears by just experiments on human urine, and the analysis of the gravelly concretions voided by gouty people.

If there is any thing juſtly exceptionable in your treatment of a fit of the gout, it is the adminiſtring abſorbents and anodine medicines. By the firſt I comprehend all alkaline powders,* and by the ſecond every preparation of opium: my reaſons for which I have already given.

Your exhortation to a patient, to bear the lowneſs of ſpirits in the paroxyſm is exceedingly juſt, and will certainly be attended with every deſirable advantage you have promiſed. I do not recollect ever to have ſeen this obſervation in any other author I have read on the ſubject of the gout. The honour of it is juſtly your due, and for it you are entitled to the

* If there are any people, who may conceive from what I have ſaid of alkaline medicines, that I entirely condemn them, I deſire they will clearly underſtand, that I mean only in gouty caſes; for I am thoroughly perſuaded, if there were no medicines of that ſort, the medical art would be defective. What can be more evident? for if it is neceſſary, that in a ſtate of health the blood ſhould be alkaleſcent, and there is a deficiency in the bile, how happily is it ſupply'd by medicine of this claſs, beſides being apparently uſeful in many other caſes!

the acknowledgments of every liberal practitioner, and all gouty people.

THE food I have taken, with most advantage in a fit of the gout, has been either water chocolate, with bread well toasted and broke into it, or with sago well boiled, with as much lemon peel as can be dispensed with, without offending the palate, to which I add the juice of half a lemon, in the quantity of a pint bason, with one or two spoons-full of either red or white wine, sweetened agreeable to the taste. With regard to myself, I never could bear even the smell of broth made of any kind of animal; however, as there is no determined rule to direct the inclination of the palate, I suppose, that that kind of food will be very salutary, more particularly if made with the part of an animal just killed; for 'tis certain, that the animal juices grow more alkalescent, in proportion to the time it is kept after being killed. If I am thirsty (which is but seldom the case) I never drink any thing but lemonade, made by squeezing into a quart of boiling water,

water, the juice of two middle sized lemons, with all their peel, pared as thin as possible, and sweetened agreeable to the taste. I neither drink wine by itself, or put it into my lemonade, or use any spirituous liquors during the fit, except the wine before-mentioned in the sago. If I am ever oppressed with flatulencies, which are very common in a fit of the gout, I take half a drachm of sweet fennel seed in fine powder, which, if repeated constantly relieves me without any inconvenience.

I greatly admire the mode you have proposed to exercise those patients, who are incapable of doing it for themselves: your general recommendation of exercise is likewise judicious, particularly in the following paragraph, which I could not resist the pleasure of copying, as it certainly cannot be too much inculcated.

PAGE 94. " His activity need be no
 " more than to persevere in the habit of
 " rubbing all over, night and morning,
 " for eight or ten minutes, and walking
 " three

“ three or four miles every day, or riding
 “ ten, or using any bodily labor or exer-
 “ cise equivalent to it. In bad weather
 “ I can see no great evil in throwing a
 “ cloak round his shoulders and walking
 “ even in the rain: the only difficulty is
 “ to summon resolution enough to ven-
 “ ture out; and a little use would take
 “ off all danger of catching cold, by
 “ hardening and securing him against the
 “ possibility of it upon that and all other
 “ occasions. If he dares not risque this,
 “ some succedaneum must be used within
 “ doors; more especially when bad wea-
 “ ther continues any time. I recom-
 “ mend it to all men to wash their feet
 “ every day, and the gouty in particu-
 “ lar, and not to lie a-bed above seven
 “ hours in summer, and eight in winter”

As a succedaneum for the exercise you
 have so well pointed out, give me leave
 to recommend the game of battle-door
 and shuttle-cock. However trifling this
 exercise may appear to some people, for
 my own part I do not know any one
 superior to it, not even that of riding on
 horseback.

horseback. It has beside this advantage, that it may be used at all times, and in any room eighteen feet long, the height is not so material; because good players never play high, and, with a little practice, indifferent ones will be able to do the same. I have the more pleasure in recommending this exercise, as it is so well calculated for women, who cannot with propriety at all times use so much labor as is necessary to keep them healthy. With the advantage of its being a social diversion, it most agreeably exercises the whole human frame by the various attitudes the players are perpetually putting themselves in, of course it creates a graceful pliancy in the joints and muscles, accelerates the circulation of the blood, and propels to the cutaneous pores all the fluids prepared by nature to pass off by this easy and salutary way; it also promotes the coöctive powers, and, if used before dinner, will admit of a considerable share of exertion, without any danger, if care is taken not to drink any thing cold at the time, or imprudently expose the body to a cold air.

As

As I am on the topic of exercise, it may not be altogether unsuitable to take notice of a question often started by many people : what is the reason, that the gout prevails more in *England* now, than it did some ages ago? Is it not occasioned by the want of proper exercise, and by peoples' secluding themselves too much from the ambient air? Our ancestors were certainly more intemperate livers, if we except the culinary arts, which indeed were not so much studied then : however, this was more than balanced by the quantity of dried, salted, and fresh meat they eat, not only for dinner and supper, but breakfast likewise. They also drank amazing quantities of strong ale and stale beer, liquors full as pernicious as wine of any sort. But how different were their exercises? At that time, there were no carriages hung on easy springs, rolling on turnpike roads; no rooms covered with warm luxurious carpets; no muffs or furs to soften and effeminate the man; no sash windows to exclude the salutary air from entering; in fine, there was not then any kind of luxury

to encourage that intolerable indolence so prevalent in the present generation. At that time of life, if either a woman or a man was obliged to go a little way, it was on foot; if a greater distance, on horseback; in both instances it was good exercise, and they were beside exposed to the salubrious air, which kept them from colds, the infant of many diseases. The rooms then, even of people of fashion, were paved with stone, which, they being used to from childhood, had the same good effect of preventing colds.* Their exercises and diversions were truly masculine: the men of fashion and distinction employed themselves in military achievements, which were exceedingly laborious: their tilts and tournament were surprising

* It has frequently occurred to me, that great numbers of tender people get colds by sitting for two hours at a time in a cold damp church (which is often shut up for a week together) while the other six days they have immured themselves in a warm room. Would it not therefore be a good piece of œconomy, if a contribution was made in every parish to erect a stove in the church, by which means all the humid and unwholesome air would be rarefied, and expelled before the parishioners entered. The small expence attending this salutary plan would be amply repaid by the preservation of their health.

surprising exertions of manly strength; the use of the bow and arrow, and the art of wielding the broad sword, were necessary accomplishments for every man that ranked as a Gentleman; and these were violent and healthy exercises. Beside this, most people of fashion had a bowling-green adjoining to their houses, where they agreeably laboured, and spent the hours in pleasing toils. To this account might be added, many more airy, masculine exercises, which not only strengthened the concoctive powers, but certainly dissipated by perspiration those acrid alkalescent humors, which, being retained in the blood, grow alkaline and cause the gout.

I HAVE now gone through your Treatise, and have made my observations on the most interesting parts of it, with all the candor imaginable. If I have advanced any thing contrary to your opinion, it was from dear-bought experience, or a strong conviction, that it was injurious to gouty people. This I considered myself as much obliged to do, as

an honest mariner is, who has been wrecked on a hidden rock, to point out where it lies. In those particulars, which appeared to me really conducive to the benefit of gouty people, I have recommended them with sincerity, and all the warmth in my power, which indeed is nothing more than justice due to your merit. If any use or advantage should result from the remarks I have made, I shall think myself happy, and have the recompence I wish for. If, on the contrary, it can be proved, that I have advanced any thing of an injurious tendency, I will recant with the ingenuous *Sydenham*, who asserted, that cathartics were pernicious in the gout, yet lived long enough to experience, in his own person, that they were particularly useful.

I am, with great Respect, SIR,

Your most obedient,

And very humble Servant,

DANIEL SMITH.

ASHTON, near BRISTOL,

January 1, 1772.

ERRATA. — Page 23. line 7, for gouty a, read a gouty. P. 27. l. 2 from the bottom for dgree, r. degree. P. 28. l. 1. for it congeals the blood, r. the blood will be congealed. P. 35. l. 3. for this r. one, Ibid. l. 18. for pancrea, r. pancreas. P. 38. l. 15. for mettle, r. metal. P. 40. l. 1. for this, r. them. P. 45. l. 7. from the bottom, for is, r. are.



